

Evidence on Guidance and Counseling



by
Gerd Christensen &
Michael Søgård Larsen

**Danish Clearinghouse
for Educational Research**



DANISH CLEARINGHOUSE
FOR EDUCATIONAL RESEARCH
DANISH SCHOOL OF EDUCATION
AARHUS UNIVERSITY

Copenhagen 2011

Title Evidence on Guidance and Counseling
Copyright © 2011 Danish Clearinghouse for Educational Research
ISBN 978-87-7430-244-5
Publication date March 2011
Author Gerd Christensen & Michael Sjøgaard Larsen
Address Danish Clearinghouse for Educational Research
Aarhus University
Tuborgvej 164
2400 Copenhagen NV
Phone: +45 8888 9980
clearinghouse@dpu.dk
<http://www.dpu.dk/en/aboutdpu/danishclearinghouseforeducationalresearch/>

Preface

This publication is an excerpt from a technical report: *Forskning om effekt af uddannelses- og erhvervsvejledning* [Research on the Effect of Educational and Vocational Guidance and Counseling], which was concluded in February 2011. The purpose of this excerpt is to present the knowledge we have on the effect of guidance and counseling in a short, precise, and readable way to allow readers to orient themselves quickly on the subject.

The technical report was developed on the basis of a contract between *Afdelingen for erhvervsfaglige uddannelser* (Department of vocational education), the Division for Guidance, Danish Ministry of Education and the Danish Clearinghouse for Educational Research, Aarhus University.

The following researchers participated in a review group and contributed to the report: Senior Researcher Berit Lødding, Nordic Institute for Studies in Innovation, Research and Education, Norway; Assoc. Prof. Peter Plant, PhD, Department of Curriculum Research, Aarhus University, Denmark; Assist. Prof. Rie Thomsen, PhD, Department of Curriculum Research, Aarhus University, Denmark; Professor Gudbjörg Vilhjálmsdóttir, PhD, University of Iceland; and Peter Weber, PhD, Institute for Education Studies Heidelberg University, Germany.

Thanks to the Division for Guidance, Danish Ministry of Education and to all the colleagues and researchers who have contributed to this brief presentation of the results of the study. The complete report with references and appendices can be found at www.dpu.dk/clearinghouse.

Gerd Christensen

March 2011

Table of Contents

Preface.....	4
Introduction	7
The history of guidance and counseling	8
Results	14
Conclusion.....	23
References to the 39 studies.....	27

The Danish Clearinghouse for Educational Research collects, analyzes, and distributes results from educational research and development work at schools in Denmark and abroad. We study research. By looking across studies, we investigate whether it is possible to determine what types of initiatives have a positive effect.

Introduction

Executive Order No. 671 og 21/06/2010 on Guidance in Relation to Choice of Education, Training and Career states that the purpose of guidance and counseling is, among other things, to help ensure that “changing from or dropping out of educational programs is limited as much as possible and that individual students complete their chosen educational programs with the greatest possible academic and personal benefit.” Therefore, guidance and counseling must help ensure that “the individual himself or herself is able to search for and use information, including IT-based information and guidance counseling programs, about education, educational institutions, and future employment.”

At the same time, the Act on Guidance promotes the overall goal of getting at least 95% of a youth cohort to complete a qualifying education. This may occur, in among other ways, by providing guidance and counseling to young people in order to ensure that the transition between various forms of education takes place as smoothly as possible – i.e., through ‘transition guidance and counseling.’

The purpose of this report is to examine the existing research on guidance and counseling in order to determine what approaches or methods for guidance and counseling best contribute to the goals set. This requires insight into the effect of the guidance and counseling methods used. It also has to do with whether one can show ‘with evidence’ that one approach appears to be more well-founded than another. This desire for insight into the research on guidance and counseling was the starting point for the study. The task, therefore, has been to uncover what guidance methods/tools the primary research has demonstrated work best for:

- The transition of young people from primary and lower secondary school to general or vocational upper secondary education
- The transition of young people from upper secondary education to higher education, and
- guidance and counseling for employed adults

We have fulfilled this task by posing the following question to existing research:

What guidance methods/tools can be shown to contribute most to guidance and counseling in connection with the transition of young people from primary and lower secondary school to upper secondary education, the transition of young people from upper secondary education to higher education, and guidance and counseling for employed adults?

Read more about the methodology that the Danish Clearinghouse for Educational Research uses on p. 29.

The history of guidance and counseling

From a historical perspective, guidance and counseling and related theories may be roughly divided into three 50-year periods. From 1850-1899, a period of transformation from an agricultural to an industrial society, the guidance and counseling of young people was based on a moral ethos of hard work and ethical conduct. The basic view was that it was necessary to develop the *character* of a young person. A corresponding trend is found in education in the form of 'character development'; the concept of 'character' used in this connection may be traced back to the philosopher Aristotle. Guidance counselors in this period were often inspired by religious aims.

Guidance and counseling for young people in industrialized cities began in the first half of the 20th century (1900-1949). The aim was to find a job, a new concept that reflected the technological developments of the time. The relation between individual, job, and industry was subjected for the first time to approaches that used scientific methodologies. First of all, efforts were made to find 'the best way' to do a job by introducing 'scientific management' through the so-called Taylor system or Taylorism, which was aimed at increasing the worker's job performance through minute rationalizations. Second, theories began to be developed in scientific psychology on 'individual differences,' which are based on the experience that there are differences in individual abilities.

This new interest in psychology led to the development of psychometric measurements and classification systems that deal especially with the individual's intelligence and personality traits. The French psychologist Alfred Binet in collaboration with Théodore Simon invented the first usable intelligence test, the so-called Binet-Simon intelligence scale. The Danish psychologist Alfred Lehmann introduced German psychophysics, which is defined as a 'precise gauge between mind and body.' Psychophysics came to constitute the theoretical basis for the so-called psychotechnical tests, which were used to test what vocation young people were suited for. In 1923, a psychotechnical department was established at the apprentice placement service in Copenhagen (*Københavns lærlingeansvning*) and, later, psychotechnical offices were set up elsewhere in the country.

The initial theories of guidance and counseling

During the period 1950-1999, the first theories of guidance and counseling emerged. At the same time, a new interest developed in relating to a person as not only an individual seeking a job but also a human being in the course of a life. To the extent that this life course was connected to the person's contact with education and the labor market, the concept of *career* was introduced. Guidance and counseling was no longer vocational counseling alone; the goal was also to help the person develop his or her career. In this connection, the concept '*career development*' arose.

While previous conceptions of the purpose of guidance and counseling turned on helping a person enter the labor market in a manner satisfactory to both parties, theories were developed to try to understand and explain what actually happens when young people choose future employment. Therefore, the theories were first and foremost considered as theoretical frameworks for understanding and explaining actual edu-

cational and vocational choices, i.e. they represented “career research.” Thereafter, the theories were used as academic justifications for how guidance and counseling as a practice should be tackled and what tools – for example, in the form of tests – could be beneficial. From this perspective, the task of the professional guidance counselor could be considered as the application of academic/theoretical insight/research – that is, as a theory-practice relationship in which the job of guidance counselor could henceforth be classified as a profession.

Current justifications for guidance and counseling

Guidance and counseling is deemed important today in relation to transitions between education and vocation, basic education and higher education, and finally between different vocations, the importance is primarily based on four conditions:

- 1) **Modernity:** It is no longer a given that children follow in their parents’ footsteps and choose the same vocation they had. There are many options, and individuals should have the opportunity to choose what makes the most sense for them.
- 2) **Breaking away from social heritage:** A welfare society is supposed to ensure optimal conditions for all citizens regardless of gender, ethnicity, or social background and to make it possible for the individual to break away from conventions and negative social heritage.
- 3) **Socio-economic aspects:** Society profits from the fact that young people get through their education as quickly as possible.
- 4) **Focus on lifelong learning and development:** Cf. OECD (1996), it must be possible for the individual to develop throughout his/her life. This encourages possibilities for changing not only workplace but also vocation and course of life.

If we look at the theoretical framework In particular, people sometimes speak of ‘the big five career theories’, all of which are of American origin: *The Theory of Work Adjustment* (TWA) developed by R.V. Davis, J.L. Holland’s *Theory of Vocational Personalities in Work Environments*, D.E. Super’s *Theory of Career Development*, L.S. Gottfredson’s *Theory of Circumscription and Compromise*, and R.W. Lent’s *Social Cognitive Career Theory* (SCCT), which is based on A. Bandura’s social cognitive theory. In addition, the career theories of the last half of the period all draw on constructivism. Despite the variation in theory, they all seem to take as a starting point a link between psychological insight into the person who is to be counseled and the surroundings/educational programs/labor market toward which the guidance and counseling is to be oriented. The point of view was once from the labor market toward the person, so that the task was to find the right job under the given conditions. The perspective much more emphasized today takes its starting point in the individual’s life course and the ever-changing interactions and adaptations between person and market.

Basis of the study

In this study, we use the concept of guidance and counseling in the same way as the World Bank, the OECD, and the EU:

Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers [...] The activities may take place on an individual or group basis, and may be face-to-face or at a distance (including help lines and web-based services). They include career information provision (in print, ICT-based and other forms), assessment and self-assessment tools, counseling interviews, career education programmes (to help individuals develop their self awareness, opportunity awareness, and career management skills), taster programmes (to sample options before choosing them), work search programmes, and transition services. (OECD, 2004)

Effects must be documented

It is important to stress that this review only contains guidance and counseling studies in which the effects have been documented. It is also important to stress that we have worked with guidance and counseling in connection with the transitions we mentioned in the introduction, i.e. 'transitional guidance and counseling.' Guidance and counseling as part of a process aimed at retaining students ('retention counseling') is not included. For example, guidance and counseling offered at a school and directed at conditions in the same school is not included.

Forms of intervention and effects

The forms of intervention (guidance and counseling activities) that *are* included in the study are classified as: 1) *Individual guidance and counseling*; 2) *Group guidance and counseling*; 3) *Guidance and counseling experiences* (in which young people themselves are active participants); 4) *Guidance and counseling tools* (for example, education plans); and, finally, *Other*.

The effects of guidance and counseling are understood in this context as 1) effects in the form of *clarification as a feeling* ('feeling' informed), 2) effects in the form of *clarification understood as the competence to act and decide*, 3) effects in the form of "*getting well underway*" with an education, and 4) effects in the form of a *completed education*. The last-mentioned impact measurement can be problematic, because it may, for example, be difficult to distinguish between whether the effect is due to the effect of a guidance or counseling effort and/or the effect of the quality of a given education.

The three target groups

We study research on guidance and counseling with respect to two target groups of young people and one group of adults: 1) Young people seen in relation to their transition from primary and lower secondary school to upper secondary education; 2) Young people seen in relation to their transition from upper secondary education to higher education; and 3) Employed adults who receive guidance and counseling. As far as the young people are concerned, only studies of young people who receive guidance and counseling before they are 20 years of age are included. Counselors are of course also participants in guidance and counseling, but the focus is on the activities they are a part of and the effects of these activities on the primary participants: those receiving guidance and counseling.

Temporal and geographic limitations

Temporally, the study is limited to research published after the year 2000. The intent has been to ensure that the guidance and counseling phenomena investigated resemble those we know today and are not part of a long-ago abandoned practice. Ensuring a certain similarity in the forms of guidance and counseling was also one of the reasons that the study has been geographically limited to research on guidance and counseling in the Nordic countries, in six Anglo-American countries (England, Ireland, USA, Canada, Australia, New Zealand), and in Western Europe (but not Southern Europe).

Methodology of the study

The work of finding the relevant research and the subsequent analytic work was done systematically and transparently on the basis of the concept note of the Danish Clearinghouse for Educational Research, which can be found on our webpage

<http://www.dpu.dk/en/aboutdpu/danishclearinghouseforeducationalresearch/conceptnote/>.

Once we had set the boundaries and made the conceptual choices described above, the next step was to determine what search profiles we should use and to carry out searches in the relevant databases. We searched 17 different national and international databases. We set up search profiles so that, in principle, all research on guidance and counseling was found (the list of databases, the search profiles used, and the screening process can be found in the technical report). The searches yielded 8355 different references. These were then screened for relevance. We ascertained that it is extremely rare to pose and answer the question of effects in research on guidance and counseling and found only 71 relevant studies, which were subsequently assessed for quality. This left us with only 39 studies.

Thirty-nine studies form the basis for the results

The 39 studies that were considered relevant for this study were selected in part, because they purportedly dealt with the question we wanted to answer and, in part, because they were assumed to be reliable in that they could document the effects of guidance and counseling. Table 1 provides an overview of the countries in which the 39 studies were conducted.

Country	No. of Studies
USA	19
New Zealand	1
Germany	5
Australia	2
Switzerland	3
Norway	2
Denmark	1
Sweden	1
Netherlands	1
Iceland	1
Austria	2
Unknown	1

Table 1

Since this study focuses on 'transitional guidance and counseling,' it is relevant to look at the breakdown of the studies into the three transitional periods:

Type of guidance studied	No. of studies
Guidance of children and youth before or during the transition from primary and lower secondary school to upper secondary education	13
Guidance of young people before or during the transition from upper secondary education to higher education	21
Guidance of employed adults	5

Table 2

In Table 2, we can see that both forms of transition guidance and counseling are covered by studies of sufficient research quality. It appears that most of the studies in transitional guidance and counseling are from upper secondary education to higher education. This has meant that we have taken this group as our starting point in our subsequent work.

Table 3 shows the breakdown of the 39 studies by type of guidance intervention (guidance and counseling activities) studied.

Guidance intervention	No. of studies
Group guidance	19
Individual guidance	13
Guidance as experience	11
Guidance tools	14
Other	7

Table 3

Table 4 shows the breakdown of the 39 studies by effects studied.

Effects studied	No. of studies
Well underway with education	8
Clarification as a feeling	20
Clarification as a decision-making competence	25
Completed education	2
Other effects	5

Table 4

The number of intervention forms (guidance and counseling activities) and effects studied is greater than the number of studies (39), because many of the studies deal with several intervention forms and several effects.

Results

The premise of the study was to investigate guidance and counseling in relation to three clearly defined groups (from primary and lower secondary school to upper secondary education, from upper secondary education to higher education, and adults). However, gradually, as the work proceeded, it appeared that a great many of the conditions that could be identified recurred throughout all three groups. These included both effects and forms of intervention (guidance and counseling activities). Only a few conditions stood out. This presentation, therefore, deals with findings across all three groups and discusses conditions that are specific to the individual group in which they occur. By highlighting and grouping the different aspects of guidance and counseling interventions shown by the studies to have significant effect, we have been able to break down the results into four categories, shown in Figure 1.

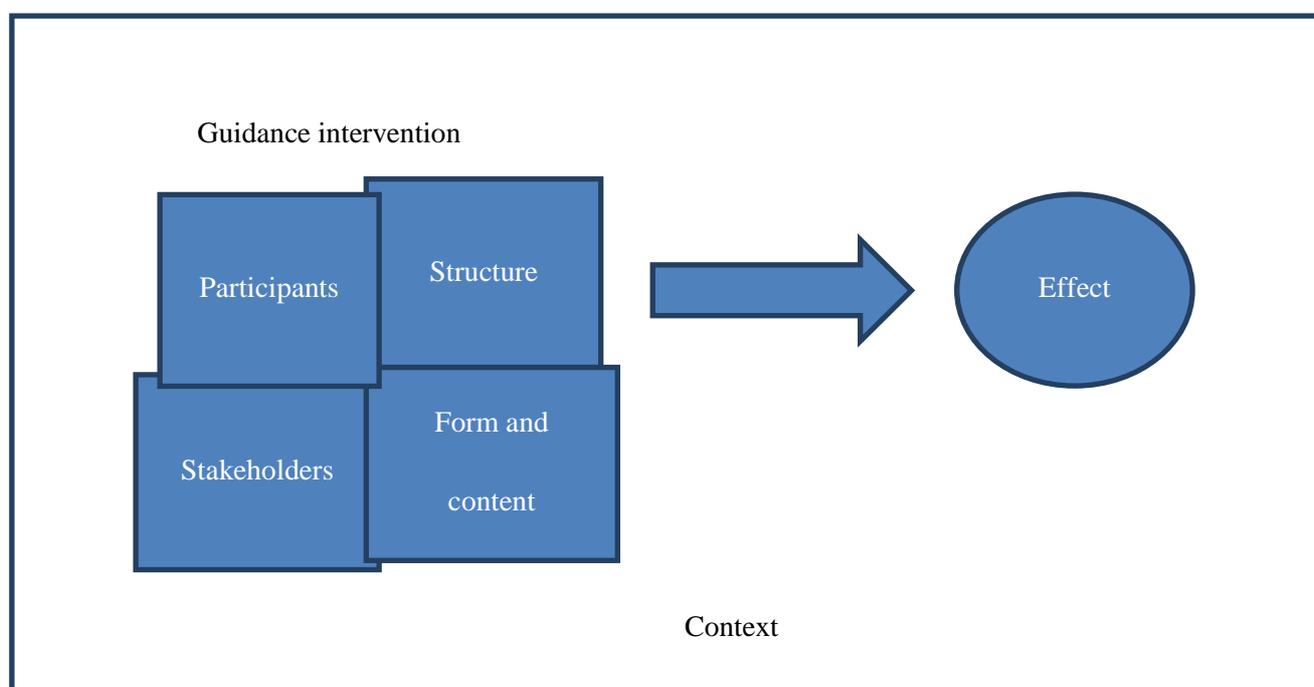


Figure 1

The form and content of guidance and counseling encompasses the conditions that are designated as 'intervention' (guidance and counseling activities).

The structure of guidance and counseling covers the conditions that have to do with other elements in the planning: Timing of efforts, duration, and the extent to which guidance and counseling should be included in the curriculum.

Stakeholders in guidance and counseling designates entities, such as the business community, that are external to the educational environment in which guidance and counseling take place but are nevertheless of essential importance for guidance and counseling – in part, because they have an interest in motivating the

workforce and, in part, because they are involved in guidance and counseling – for example, as speakers and in connection with job shadowing and work experience programs.

Finally, the *participants in guidance and counseling* fall into two groups: those being counseled and those who are counseling. Those being counseled enter the counseling situation with a large number of variables, including level of experience, knowledge and motivation, and factors linked to social background, ethnicity, and gender. Those who counsel are a group consisting of many subgroups: The ‘formal counselors,’ i.e. the guidance counselors or teachers who are responsible for the process, and the ‘informal guidance counselors,’ i.e. the parents and friends who, according to the studies, also play an important role.

Form and content of guidance and counseling

Individual guidance and counseling

Many of the studies stress that *personal interviews* are of extraordinary importance. It is important that young people are seen and heard as individuals, and many studies emphasize the personal interview as *the* single guidance and counseling measure that students, regardless of gender, assess as the most valuable. The importance of individual guidance and counseling with respect to decision-making competence in connection with transitions between primary and lower secondary school and upper secondary education is crucial. The personal relationship with the counselor is, thus, important for whether vulnerable young people can be retained in the education system. In the studies that deal with guidance and counseling for adults, personal interviews are used in combination with workshops. This, too, seems to have a positive effect. However, the personal interview is not unproblematic. One study of the transition between primary and lower secondary school and upper secondary education indicates that, despite the fact that young people like personal interviews, the counselor may come to dominate the interview. Some studies show that male students are critical of the information level and professionalism of the counselors, while female students are more uncomfortable during conversations with the counselor than male students. One interpretation may be that individual guidance and counseling are relatively sensitive to personal relationships such as the personal interaction between the counselor and the person being counseled or that individual guidance and counseling may provide an opportunity for personal relationships to play a role.

Class-based guidance and counseling/joint guidance and counseling

In most of the studies that are categorized as ‘group guidance and counseling,’ the ‘group’ appears as a class. In reality, there are different variants of ‘joint guidance and counseling.’ In this context, the class or group is emphasized as the forum in which information can be disseminated and courses can take place, just as presentations can be made by people invited in from, for example, workplaces and educational institutions. This also includes various forms of information, students’ individual information searches in groups, etc. When it is approached in this way, joint guidance and counseling has an effect. Various studies, however, mention that some students were more uncertain about this form of guidance and counseling, since the amount of information seemed confusing. As seems to be the case with many of the other guidance and counseling activities, this form of guidance and counseling must be combined with other guidance and counseling activities.

The group as a discussion forum

It appears from many studies that groups – even large ones – are an advantage if it is possible to facilitate

discussions between the students. Groups can also be an advantage if there is a common interpretation of test results. The group is ascribed significance – both as a class (curriculum) and in the form of smaller groups (different forms of project work). In the smaller group, personal contact can be established that has similarities to what goes on in individual guidance and counseling. At the same time, however, it is stressed that young people are subject to special influence by their friends. This means that group pressure can be strong, which may indicate that guidance and counseling in the form of group work should be steered and led by an especially competent person.

Workshops

A number of studies show that the integration of guidance and counseling in the form of workshops in which students for example interview each other in pairs and discuss education and career choices with their parents leads to a significant improvement in decision-making competence. Workshops are also useful in relation to groups of adults.

Computer-based guidance and counseling

Several studies deal with computer-based programs for guidance and counseling. These studies show that students feel motivated by programs that are similar to computer games, because they find them entertaining. It also appears that online courses at the university level can ease the transition between upper secondary education and higher education, just as information and study plans can have a positive effect on students' decision-making competence with respect to level of information and goal orientation. Much indicates, however, that computer-based activities cannot stand alone but should be combined with other guidance and counseling activities.

Written materials for guidance and counseling

Tools for guidance and counseling in the form of informational materials (pamphlets, webpages, guidance and counseling fora, etc.) and education plans appear to be significant for the level of information students acquire. This is particularly important for students from homes with limited and/or negative experience of education and who do not have immediate access to this information. However, it is an advantage in terms of increased competence if career information is passed on personally instead of in writing. Thus, written materials, too, should be combined with other guidance and counseling activities.

Work experience programs and job shadowing

Work experience programs and job shadowing have a great significance for young people in the transition from primary and lower secondary school to upper secondary education and in the transition from upper secondary education to higher education. This form of guidance and counseling helps inform students about what it is like to enter into working life. It is different for groups of adults. They have a greater need to reflect on their professional life and career from the perspective of their life history. In relation to the transition from primary and lower secondary school and upper secondary education, it has been found that work experience programs have great significance for the decision-making competence of young people. A work week and being part of a work day is effective because, among other reasons, it is advantageous for the weakest students. According to one study, this form of guidance and counseling activity, which take its starting point in the interests of the person being counseled, is generally evaluated positively by all students. This is supported by the results of another study: an active form of education guidance and counseling – for example, a visit to a workplace, work-experience programs or bridge-building projects – seems to

be the most effective with respect to students' decision-making competence. Success is fundamentally conditioned on the systematic organization of work-experience programs, better communication between institutions, and the inclusion of work-experience programs in a coherent guidance and counseling process. If this does not occur, there is a danger that student choices of work experience placements will be random. The effect is also contingent on a follow-up on student experiences. The lack of a subsequent evaluation of work experience programs is mentioned as a possible weakness in these guidance and counseling activities.

Several forms of intervention in combination

A number of studies indicate that it is precisely the *combination* of several different forms of intervention (guidance and counseling activities) that has significance for whether there is an increase in students' decision-making competence and feeling of clarification. Although several studies highlight the personal guidance and counseling interview, it is clear that students are positive toward the use of a variety of forms of intervention. The interests of all students are best catered for in this way. This indicates that students' different reactions to guidance and counseling must be taken into account and that guidance and counseling should be based on individuals' interests and needs.

Summary:

- Individual guidance and counseling is emphasized as effective, because it is personal and can be adapted to each person. However, this presumes that the guidance counselor does not dominate.
- Group guidance and counseling is effective when it takes place as joint guidance (information, presentations, etc.) and counseling in which the class is divided into discussion groups.
- Tools such as programs and websites are a useful supplement but must be combined with other activities to have an effect.
- Work experience programs and job shadowing are important for decision-making competence and a feeling of clarification but should be planned thoroughly and followed up.
- What seems to be most important, however, is that many forms of intervention (guidance and counseling activities) are included in the guidance or counseling as a coherent whole.

Structure of guidance and counseling

Timing

It appears from several studies that it is of decisive importance that guidance and counseling is not commenced too late in the school process, which in several studies seems to be 9th grade. By this time, the majority of students have already made decisions about their further education. Instead, an earlier and more continuous effort is emphasized. However, this must be nuanced: In one study, it appears that guidance and counseling that is commenced too early in the process is just as problematic as guidance and counseling that is commenced too late. The problem here is that students lack clarification and that guidance and counseling, therefore, is without effect. Another study has found that students who are not mature enough do not understand the importance of guidance and counseling and therefore consider it useless. However, it should be stressed here that the maturity of young people varies from culture to culture, just as it is a culturally conditioned phenomenon whether young people are used to dealing with this type of question. It appears that the timing of the intervention (the guidance activity) is emphasized as impor-

tant, but it is not possible on the basis of this study to provide any unequivocal proposal for when guidance and counseling should be commenced.

Duration

A number of studies look at the connection between the duration of the guidance and counseling process and its effect – most often concluding that duration apparently does not influence effect. Even though it is not a part of the conclusions of the studies, however, we have found that there is a connection in that the studies that investigate shorter periods find that guidance and counseling have little effect, whereas the studies that deal with longer periods find that guidance and counseling have an effect. That longer-term guidance and counseling activities have an effect can thus raise a question about the claim that the duration of the guidance and counseling process is insignificant. However, we cannot conclude this on the basis of the studies included in this investigation. Correspondingly, we cannot conclude that the duration of a guidance and counseling activity has no significance for its effect.

Integration into the curriculum

In the studies, there are different examples of the integration of guidance and counseling into the curriculum and the school's other activities. A number of them emphasize that this can be an advantage. Integration may take place in the form of various long-term processes of a project nature. A majority of the studies that deal with the 'group guidance' form of intervention examine the effect of various forms of courses. One study investigated a course whose purpose was to contribute to students' decision-making competence and feeling of clarification through curriculum strategies with a special focus on working life (courses in career planning, presentations, teacher instruction and demonstration, experiences with working life, etc.). The process had some effect on these parameters even three years after the intervention (the guidance activity). Another study mentions that there may be an advantage in developing curriculum strategies in the form of 'guidance and counseling as a discipline.' One study shows how the establishment of a 'school-within-the-school,' which provides alternative options to vulnerable young people, had an effect. Most importantly, the students acquired academic skills. Thus, guidance and counseling cannot be viewed in isolation but must be seen in connection with a professional/academic element.

Summary

- The timing of guidance and counseling interventions (activities) has significance for their effect, but it is not possible on the basis of this review to determine precisely when the right time is.
- It is not possible on the basis of this review to draw any conclusions about the influence of the duration of the guidance counseling process on its effect.
- Guidance or counseling may be advantageously integrated into the curriculum. In this way, guidance counseling can become part of a more holistic process.

Stakeholders in guidance and counseling

Involvement of the business community and other educational institutions

Insofar as guidance and counseling includes different forms of work experience or job shadowing programs, it is of decisive importance that educational institutions have a network of interested parties to make it possible for students to participate in these activities. This is mentioned in a number of studies, and one of them states that a part of this network is often constituted by parents. This is often exploited for organizing

visits to a company or organization (including job shadowing) and for obtaining work experience placements. Some studies also mention the significance of visits to the school by representatives from the business community and educational institutions. This is an element emphasized by those seeking counseling as something that arouses interest and motivation and which, therefore, has significance for decision-making competence and a feeling of clarification.

Collaboration

Thus, it can be conducive to guidance and counseling if there is collaboration between not only educational institutions and potential recruiters but also between institutions on the same and on different levels. The significance of collaboration across institutions is mentioned in a number of studies as something that can be beneficial for the quality of guidance and counseling and for the ease of transition between different levels of education and between education and the workforce. The studies that deal with the structuring of work experience programs conclude that the preconditions for work experience programs to function optimally is that they are organized systematically, that there is better communication between schools, and that the work experience program is included in a coherent guidance and counseling process. If these preconditions are absent, it is deemed a problem. Therefore, there is a need for broad communication and collaboration on vocational and educational guidance and counseling that does not only encompass the local community but also the entire country.

Summary

- Networks are a precondition for obtaining work experience placements and arranging visits to companies or organizations. Here, parents play a role.
- Businesses and institutions should collaborate on the structure of work experience programs.
- Representatives of educational institutions and the business community may be advantageously involved as speakers.
- It is important to collaborate across institutions on the same and different levels.

The participants in guidance and counseling

The significance of the students' knowledge of their options

A number of studies deal with the significance of the students' level of knowledge and the effect of guidance and counseling. One study of the transition from primary and lower secondary school to upper secondary education found that students' presuppositions prior to guidance and counseling have an influence on what they get out of the guidance and counseling. The clearer they are about options and decisions before the guidance and counseling, the more detailed the guidance and counseling can be. Thus, guidance and counseling must be adapted to the individual student's starting point and needs. Another study found that information that is adapted to the students' current needs facilitates their decision-making competence. A third study points out that an intervention at the right point in time and adapted to the needs of the students and the educational institutions that allows for subsequent student reflection increases the benefit students receive from the guidance and counseling intervention (the guidance and counseling activity). In the vast majority of studies, guidance and counseling is considered to contribute to students' awareness of their options and confidence in their decisions. However, some studies have found

that guidance and counseling does not necessarily have an immediate elucidating effect: Guidance and counseling in the short run can increase confusion and uncertainty in those being counseled. This immediate negative effect of guidance and counseling, however, is considered by the authors as an essential element in clarifying what paths are open to the student, because confusion can constitute an element in the process of becoming aware of one's options and gaining confidence in one's decisions. Correspondingly, there are studies that have found that participation in guidance and counseling activities could have the effect of making students less confident that they are capable of achieving their desires and goals. However, this need not be a disadvantage but can be interpreted as evidence that the students' understanding of future options was unrealistic prior to the guidance and counseling and that they acquired through the process of counseling a more realistic vision of themselves and their own possibilities.

The significance of social background and ethnicity

It is a fundamental assumption in a number of the studies that one purpose of guidance and counseling is to counteract a negative social heritage, so that even students from homes with limited and/or negative experience of education can acquire more education. Various studies deal explicitly with students from homes with limited and/or negative experience of education and students with a minority ethnic background. These studies show that guidance and counseling has a greater effect on students from homes with limited and/or negative experience of education. These students attribute the greatest value to guidance and counseling, especially if they have changed their education plans. The effect is ascribed primarily to the relationship between the person providing the counseling (the guidance counselor or teacher) and the person being counseled. Students from a low socioeconomic background are unlikely to have a role model or caregiver with a higher education in their home environment and the guidance counselor or teacher may therefore come to play that role. A minority ethnic background is not emphasized as a particular trait of students who require special measures or attention in guidance or counseling.

While it appears that guidance or counseling cannot make up for socioeconomic and educational conditions in the student's home environment, it can contribute to an increase in the student's awareness of their options and decision-making competence. Even though a number of the studies deal with conditions relevant to young people with a minority ethnic background, there are no studies that find that ethnicity is significant in itself, unless it is linked to poor social conditions.

The significance of gender

A number of the studies deal with gender in the form of special preferences and/or in the form of special barriers linked to gender or that have proven to be specific to participants of one gender. It appears in one study that female students were more engaged in the activities than male students, but it is not evident whether this had significance for the outcome of the guidance and counseling process. Another study of individual guidance and counseling activities found that the understanding of guidance and counseling varies in relation to gender: Female students assessed guidance and counseling most positively, while male students were the most critical of the guidance counselor in terms of how well-informed and conscientious they deemed him or her to be. On the other hand, female students were more uncomfortable during conversations with the counselor than the male students. The high achievers assessed the guidance and counseling most positively. There were no identifiable differences in relation to ethnicity. For students in transition from primary and lower school to upper secondary education, girls were more capable of identifying

their interests while boys showed more overall readiness for a career choice. In another study – also of the transition from primary and lower secondary school to upper secondary education, it was found that there are gender-specific educational and vocational interests and that changing gender-specific career choices is a long-term process. It was found that role models had some significance for whether young people wanted to choose careers that were non-traditional for their gender but also that role models do not in themselves have a great impact. It was also found that a gender-specific workshop introduction and meeting place at the school could help retain girls in an educational context in which they were a minority.

The counselor's level of knowledge

Studies dealing with guidance counselors indicate the significance of whether the person providing the counseling has up-to-date knowledge of relevant educational and vocational opportunities for young people. This has particular significance if the counselor deals with at-risk students who are not much exposed to this knowledge in their home environments or among friends.

Coaching and psychological skills

The counselor's educational level, however, is not only a question of specific knowledge about educational programs and the labor market but also of special skills for dealing with and coaching personal problems. In the five primary studies dealing with groups of adults, the person providing the guidance and counseling activity was a trained counselor or psychologist. This is only true for very few of the other studies, which could indicate that there are other traditions for groups of adults than for the guidance and counseling linked to schools and educational institutions and processes involving children and young people. It also appears from the studies that the forms of intervention (activities) used for adults are more psychologically oriented than those found in studies dealing with the first two transitions.

Personal relationships

Above all, several studies show that it is crucial that young people are surrounded by committed people. This is especially expressed in the priority the personal guidance interview is attributed by young people. This applies to the influence of teachers, counselors, and parents. Teachers act as role models for young people and the active involvement of other role models is used to encourage young people to choose career paths that are non-traditional for their gender. A personal relationship can also develop with a mentor. One study thus mentions that a mentor is crucial for students' transitional competence.

It is difficult on the basis of these studies to conclude whether a personal relationship with the counselor is more important than the counselor's level of education. Presumably, a combination of the two factors is optimal: The counselor must be personal *and* professional. Moreover, it is emphasized that the education and training of the counselor will make it possible for the counselor to develop certain professional relationship skills that facilitate this process.

The significance of parents

A number of the studies deal with the influence parents and friends have on the choices of young people. One study notes the influence of parents and suggests that parents have an important role to play as 'guidance counselors' for their children. A number of studies find that the students who have well-educated parents have the fewest problems in choosing a future career and, at the same time, have the greatest confidence in their own ability with respect to access to information about careers. The fact that parents

are involved as 'informal' counselors for young people may indicate that it would be an advantage to involve them in a more formal process. One study mentions a process in which one of the parameters is that the students interview each other in pairs and that they have conversations with their parents about educational and career choices. Moreover, parents, like teachers and counselors (and presumably other adults), act as role models.

The significance of friends

A number of studies show that the influence of friends is especially strong during upper secondary education. In guidance and counseling contexts, this can be conducive or inhibitory to the desired effect of the guidance or counseling: It can be a conducive factor if the trendsetting group in the class is positive toward guidance and counseling but inhibitory if the opposite is the case. One study also illustrates the significance of social pressure for the choices of young people.

Summary

- The level of awareness of the options available and confidence in his or her own decisions as well as the social background of the person being counseled have an influence on the guidance or counseling.
- Guidance or counseling has the greatest significance for students from homes with limited and/or negative experience of education.
- Gender plays a role in terms of the understanding of guidance or counseling and particular educational and occupational preferences and focus points.
- A single study indicates that it may be an advantage for female students in a 'male profession' to have their own forums, free of male students.
- No factors have been found linked to ethnicity alone.
- It is essential that the guidance counselor is sufficiently well-informed.
- It is an advantage if the guidance counselor has an education in guidance counseling but the personal relationship between the guidance counselor/teacher and the person being counseled is more important.
- Guidance counselors, teachers, and parents act as role models.
- Parents and friends have significant influence as 'informal' guidance counselors.

Conclusion

This review has looked at guidance and counseling in the transition from primary and lower secondary school to upper secondary education, from upper secondary education to higher education, and of employed adults, i.e. 'transition guidance and counseling.' It contains only studies that deal with guidance and counseling in which the effects are documented.

It appears from the foregoing section that, on the basis of the 39 studies included in this review, we can say that what contributes most to guidance and counseling as a feeling of clarification and decision-making competence is a *combination of many forms of intervention (guidance and counseling activities) that are part of a curriculum.*

The personal relationship between guidance counselor/teacher and the person being counseled is of essential importance, just as it is important that guidance and counseling take their starting point in the needs of the individual. The personal relationship is established in the *personal interview* but may presumably also be established in *groups* that are led/facilitated by a counselor.

The person who counsels must have *up-to-date* knowledge and it is an advantage if the counselor is *educated as a counselor*. Collaborations across institutions and between institutions and the business community should be established, and *parents* are also resources and essential to the process of clarification for young people.

Guidance and counseling are *of the greatest significance for students from homes with limited and/ or negative experience of education* but cannot in themselves mean a break with a negative social heritage. Relationships of the person being counseled (for example, *parents and friends*) should be taken into consideration in the guidance and counseling intervention (guidance and counseling activities). This indicates that guidance and counseling must be seen as a holistic process rather than a relationship that only touches the educational institution. These conditions primarily apply to studies dealing with the first two transitions. The studies touching on adults deal with the personal mode of relating to one's work life and the link between work life and personal well-being.

In sum, the existing research on the effects of guidance and counseling indicates the following:

- Individual guidance or counseling is effective because it is personal and can be adapted to the individual, provided that the guidance counselor does not dominate.
- Group guidance or counseling is effective when it is a part of common guidance (information, presentations, etc.) and counseling in which the class is divided into discussion groups.
- Tools such as programs and websites are a useful supplement but must be combined with other activities to have effect.
- Work experience programs and job shadowing are important for the development of decision-making competence and a feeling of clarification, but the effect is conditional on thorough planning and follow-up.

- What is most important, however, is that a variety of forms of intervention (guidance and counseling activities) are included in a coherent whole.
- Guidance and counseling can advantageously be integrated into the curriculum. In this way, guidance and counseling may be part of a more holistic process.
- Networks are necessary for obtaining work experience placements and arranging job shadowing opportunities. Furthermore, it can be an advantage to involve representatives of educational institutions and the business community as speakers at educational institutions.
- It is important to cooperate across institutions on the same and different levels.
- The level of knowledge and social background of the person being counseled has influence on the counseling. No factors have been found linked to ethnicity alone unless ethnicity is linked to poor social conditions.
- Guidance counseling has the greatest significance for students from homes with limited and/or negative experience of education but cannot in itself lead to a break with a negative social heritage.
- It appears from some studies that there are special preferences and focus points linked to gender. A single study has shown that it may be advantageous for young women in a 'male profession' to have their own forums in which they can experience the profession and social relations without the participation of male students.
- It is important that the guidance counselor is sufficiently well-informed and an advantage if he or she is educated and trained as a counselor, but the personal relationship between counselor and the person being counseled is most important in terms of effect.
- Parents and friends have decisive influence as 'informal' counselors.
- Parents, teachers, and guidance counselors are role models.

Conditions insufficiently illuminated in the research on which this study is based

- We have identified that the timing of guidance and counseling interventions (guidance and counseling activities) is crucial (not too early and not too late in the schooling process), but it is not possible on the basis of this study to give an exact indication of the right point in time.
- It is not possible on the basis of this study to determine the role the duration of the guidance counseling process has for its effect.
- It is not possible on the basis of this study to draw conclusions about the long-term effects of guidance and counseling.

The current best knowledge

The Danish Clearinghouse for Educational Research was founded in 2006 because there was and still is a will to strengthen the applicability of educational research. This is done by exploiting already existing research. The Clearinghouse helps provide politicians and practitioners access to reliable and informed knowledge about child-raising, teaching, and education that can be used in educational practice and the political decision-making process.

In addition, the Clearinghouse helps provide research environments with a greater and more reliable overview of the existing research. The aim is to make the current best knowledge available to politicians, practitioners, and researchers.

The Clearinghouse is a center that illuminates practice-oriented, political, or research policy problems by examining the existing primary research.

The Clearinghouse has six basic activities:

Collection. The Clearinghouse systematically collects information on all the research that can, in principle, illuminate a specific “review” question.

Construction of a database. The Clearinghouse collects, classifies, and stores information on research over a long period of time in a database. Users thereby gain overall access to and a systematic overview of research that would otherwise be diffuse.

Quality assessment. The Clearinghouse assesses research for quality and thus stands as a guarantor for the quality of the research that is included in the answer to a review problem.

Extraction and comparison. The Clearinghouse extracts the most important data from each individual research report and gathers it in one document, thereby increasing the clarity and transparency of information for the user.

Synthesis. The individual research conclusions are developed into a general conclusion, recommendation, model or similar result that incorporates and cuts across the individual studies.

Distribution. The Clearinghouse actively strives to disseminate relevant knowledge about national and international research results.

Each of these six activities can be an independent product. However, the sequence of steps cannot be skipped, for example, by going directly from collection to synthesis. Instead, it is possible to stop the process after any one of the six steps: If the process is continued all the way to synthesis, it corresponds to carrying out a so-called systematic review. This study on guidance and counseling is an example of such a systematic review.

The systematic review process

On the one hand, a systematic review provides insight into how prior research has handled a given problem and, on the other, collects all the knowledge that we can extract at the present time from existing research results.

The work that leads to a systematic review begins with the clarification of the question to be answered. A search strategy, classification criteria, data extraction, and synthesis method are worked out.

The next step is to find researchers for the research group who have special knowledge of precisely the question at hand. Then, the search for studies commences and, when it is completed, the screening of the studies begins to determine whether they are relevant to the review question.

Together with the Clearinghouse, the review group of researchers assesses the results and classifies the studies according to research quality; data is extracted from the studies and on the basis, a synthesis of results is prepared. The review process leads to a written report prepared in collaboration between the review group and the Clearinghouse and forms the basis of subsequent communication actions.

Read more at <http://www.dpu.dk/en/aboutdpu/danishclearinghouseforeducationalresearch/>

References to the 39 studies

- Astleitner, H., & Kriegseisen, G. (2005). Welche Auswirkungen haben verschiedene Arten von Berufsorientierungsunterricht? Eine quasi-experimentelle Felduntersuchung. *Erziehung und Unterricht*, 52(2), 138-145.
- Bergzog, T. (2006). Beruf fängt in der Schule an. Schülerbetriebspraktika in der Berufsorientierungsphase. *Berufsbildung in Wissenschaft und Praxis*, 35(3), 28-31.
- Bergzog, T. (2008). Beruf fängt in der Schule an. Die Bedeutung von Schülerbetriebspraktika im Rahmen des Berufsorientierungsprozesses. Bonn: Bundesinstitut für Berufsbildung.
- Bishop, M. J., & White, S. A. (2008). The Clipper Project: Exploring whether Early Engagement through Web-Based Instruction Can Help Ease High School Students' College Transition. *Journal of College Student Retention: Research, Theory & Practice*, 9(3), 357-376.
- Borgen, J., Spord, & Lødding, B. (2009). Implementering av faget utdanningsvalg på ungdomstrinnet: Delrapport II fra prosjektet Karriereveiledning i overgangen mellom ungdomsskole og videregående opplæring. Oslo: NIFU STEP.
- Boyd, S., & McDowall, S. (2003). Innovative pathways from secondary school gaining a sense of direction. Paper presented at the NZARE/AARE Conference 2003, Auckland.
- Boyd, S., & McDowall, S. (2004). Innovative Pathways from Secondary School: Where are the young people now? Wellington: NZARE.
- Bragg, D. D., & Ruud, C. M. (2007). Career Pathways, Academic Performance, and Transition to College and Careers: The Impact of Two Select Career and Technical Education (CTE) Transition Programs on Student Outcomes. In Brief. Urbana-Champaign, Illinois: University of Illinois.
- Brandstätter, H., Grillich, L., & Farthofer, A. (2002). Studienverlauf nach Studienberatung. *Journal of Educational Psychology*, 16(1), 15-28.
- Buland, T., & Havn, V. (2000). Evaluering av prosjektet "Bevisste utdanningsvalg", Delrapport IV, Fokus på elevene. Trondheim: SINTEF IFIM.
- Buland, T., & Havn, V. (2002). Tusen blomster i fullt flor?: evaluering av prosjektet "Delt rådgivningstjeneste" : delrapport III. Trondheim: SINTEF IFIM.
- Dellana, S. A., & Snyder, D. (2004). Student Future Outlook and Counseling Quality in a Rural Minority High School. *The High School Journal*, 88(1), 27-41.
- Doyle, J.W. (2001) The Effects of Career Decision-Making Workshops on the Career Uncertainty Scores of Adult Workers in Career Transition. Clemson SC: Clemson University
- Fowkes, K. M. (2007). An evaluation of career information system in secondary schools. Eugene: Graduate School of the University of Oregon
- Healy, C.C. (2001) A Follow-Up of Adult Career Counseling Clients of a University Extension Center. *Career Development Quarterly*, 49(4), 363-373

- Heppner, M. J. et. al. (2004) The Role of Problem-Solving Appraisal in the Process and Outcome of Career Counseling. *Journal of Vocational Behavior*, 65(2), 217-238.
- Hill, L. D. (2008). School strategies and the "college-linking" process: Reconsidering the effects of high schools on college enrollment. *Sociology of Education*, 81(1), 53-76.
- Hirschi, A., & Lage, D. (2008a). Using Accuracy of Self-Estimated Interest Type as a Sign of Career Choice Readiness in Career Assessment of Secondary Students. *Journal of Career Assessment*, 16(3), 310-325.
- Hirschi, A., & Läge, D. (2008b). Increasing the career choice readiness of young adolescents: An evaluation study. *International Journal for Educational and Vocational Guidance*, 8(2), 95-110.
- Jones, L. K., Sheffield, D., & Joyner, B. (2000). Comparing the Effects of the Career Key with Self-Directed Search and Job-OE among Eighth-Grade Students. *Professional School Counseling*, 3(4), 238-247.
- Kracke, B. (2006). Was tun nach dem Abi? Die schulische Vorbereitung auf die Studium und Berufswahl aus der Sicht von GymnasiastInnen in der Sekundarstufe II. *Diskurs Kindheits- und Jugendforschung*, 1(4), 533-549.
- Kracke, B., Olyai, N., & Wesiger, J. (2008). Stand der Berufswahl und Qualität des berufsbezogenen Explorationsverhaltens im Jugendalter. *Erziehung und Unterricht*, 55(1), 51-60.
- Krumboltz, J. D., Vidalakis, N., & Tyson, J. (2000). Virtual Job Experience: Try before You Choose. New Orleans: Paper presented at the Annual Meeting of the American Research Association.
- Lapan, R. T., Aoyagi, M., & Kayson, M. (2007). Helping Rural Adolescents Make Successful Postsecondary Transitions: A Longitudinal Study. *Professional School Counseling*, 10(3), 266-272.
- Lapan, R. T., Tucker, B., Kim, S. K., & Kosciulek, J. F. (2003). Preparing Rural Adolescents for Post-High School Transitions. *Journal of Counseling & Development*, 81(3), 329-342.
- Lekes, N., & et al. (2007). Career And Technical Education Pathway Programs, Academic Performance, And The Transition To College And Career. Crookston: National Research Center for Career and Technical Education, University of Minnesota.
- Lovén, A. (2000). Kvalet inför valet om elevers förväntningar och möten med vägledare i grundskolan. Malmö: Institutionen för Pedagogik, Malmö Högskola.
- Matthes, Y., & Marx, H. (2000). Evaluation eines Entscheidungstrainings zur Laufbahnwahl in der gymnasialen Oberstufe. *Journal of Educational Psychology*, 14(2-3), 137-145.
- Maxwell, N. L. (2001). Step to college: Moving from the high school career academy through the 4-year university. *Evaluation Review*. Vol 25(6), Dec 2001, pp. 619-654, 25(6), 619-654.
- Maxwell, N. L., & Rubin, V. (2000). High School Career Academies: A Pathway to Educational Reform in Urban School Districts? Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.
- Maxwell, N. L., & Rubin, V. (2001). Career Academy Programs in California: Outcomes and Implementation. CPRC Report. Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research.
- McIlveen, P. & Patton, W. (2008) An interpretative phenomenological analysis of adult clients' experience of My Career Chapter. *Australian Journal of Career Development*, 17(3), 51-62
- McWhirter, E. H., Crothers, M., & Rasheed, S. (2000). The effects of high school career education on social-cognitive variables. *Journal of Counseling Psychology*, 47(3), 330-341.

- Mehlbye, J., Hagensen, P., & Halgreen, T. Et frit valg? Unges overgang fra grundskolen til ungdomsuddannelserne. (2000). København: Amternes og Kommunernes Forskningsinstitut.
- Mittendorff, K., Jochems, W., Meijers, F., & den Brok, P. (2008). Differences and Similarities in the Use of the Portfolio and Personal Development Plan for Career Guidance in Various Vocational Schools in The Netherlands. *Journal of Vocational Education and Training*, 60(1), 75-91.
- Multon, K. D.; Wood, R.; Heppner, M. J.; Gysbers, N. C. (2007) A Cluster-Analytic Investigation of Subtypes of Adult Career Counseling Clients: Towards a Taxonomy of Career Problems. *Journal of Career Assessment* 15(1), 66-86
- Rothman, S., & Hillman, K. (2008). Career Advice in Australian Secondary Schools: Use and Usefulness. Longitudinal Surveys of Australian Youth. Canberra: Australian Council for Educational Research.
- Ryken, A. E. (2006). "Goin' Somewhere": How Career Technical Education Programs Support and Constrain Urban Youths' Career Decision-Making. *Career and Technical Education Research*, 31(1), 49-71.
- Schütte, M., & Schlausch, R. (2008). Zur Wirkung von kooperativen Angeboten der Berufsorientierung auf die Berufswahlreife. Ergebnisse einer fragebogengestützten Evaluationsstudie an allgemein bildenden Schulen in Bremen und Niedersachsen. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 104(2), 215-234.
- Smith, D., & et al. (2005). A systematic literature review of research (1988-2004) into the impact of career education and guidance during Key Stage 4 on young people's transitions into post-16 opportunities .London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Strohm, D. A. (2008). The impact of a cognitive information processing intervention on dysfunctional career thoughts and vocational identity in high school students. Manhattan, Kansas: Kansas state University.
- Teuscher, U. (2003). Evaluation of a Decision Training Program for Vocational Guidance. *International Journal for Educational and Vocational Guidance*, 3(3), 177-192.
- Turner, S. L., & Lapan, R. T. (2005). Evaluation of an Intervention to Increase Non-Traditional Career Interests and Career-Related Self-Efficacy Among Middle-School Adolescents. *Journal of Vocational Behavior*, 66(3), 516-531.
- Vilhjalmsdottir, G. (2007). Outcomes of two different methods in careers education. *International Journal for Educational and Vocational Guidance*, 7(2), 97-110.
- WestEd, & Mpr. (2002). California School-to-Career: Helping Students Make Better Choices for Their Future. Final