ABSTRACT

The first assessment of learning outcomes in home economics took place in March 2014, as part of the national education evaluation plan. The project was launched in February 2013 by the Finnish National Board of Education, and was continued by the National Centre for Education Evaluation when it took over the assessment of learning outcomes in basic education on 1 May 2014. Data for the assessment was collected by a stratified sampling from 89 Finnish-speaking and 15 Swedish-speaking schools, with a broad representation of AVI areas (operating areas of the Regional State Administrative Agencies) and municipal groups. Systematic sampling was used to select 9th grade students from each of the participating schools. The student sample covered both those who had taken home economics as part of their core subjects and those on optional home economics courses. The analyses and results of this report are based on the performance of a sample of 3,541 students.

The national test was comprised of two parts: a written exam and a demonstration of practical skills. Both parts were based on the core contents of home economics and the final assessment criteria for the grade of eight (8), as determined in the 2004 national core curriculum for basic education. The purpose of the assessment was to analyse the national level of competence acquired by ninth graders in home economics in relation to the objectives set out in the national core curriculum. In preparing the written exam questions, the variability of tasks, in terms of task type and level of difficulty, was considered. The demonstration was designed to simulate a real-life situation as much as possible, while covering the areas highlighted in the national core curriculum: cooperation and interaction skills, practical work skills, and information acquisition and processing skills.

The assessment was supplemented with sections on student background data, and the students' views on the studying and learning of home economics and their related extracurricular activities. The assessment also included a written survey for teachers, and an electronic survey for principals in the sample schools. Home economics teachers were asked about their views and opinions concerning the curriculum, assessment, and their own teaching practices, while the questionnaire for principals focused on school practices, teaching arrangements, prerequisites for learning, and leadership skills.

In the written exam and the demonstration, the student sample correctly completed 63 per cent of the tasks on average, scoring an average of 61 per cent of the maximum points in the written exam and 72 per cent in the demonstration. On average, girls performed better than boys in both exams. In the written exam, they correctly completed 68 per cent of the questions on average, their results being 12 per cent higher than those of boys. In the demonstration, girls correctly completed 77 per cent of the tasks on average, an improvement of 10 per cent compared to the boys. With regard to the core contents, described in the 2004 national core curriculum for home economics, the best results were achieved in the written exam on "Family and Living

Together" (66.2 per cent correctly completed) and the weakest results on "Nutrition and Culture of Food" (54.7 per cent of maximum points).

On average, the student sample in Finnish-speaking schools performed better (62.8 per cent of maximum points) in the whole exam when compared to the sample in Swedish-speaking schools (58.2 per cent of maximum points). A similar difference in the proportion of correctly completed questions was observed between the language groups in the written exam (61.6 per cent in Finnish-speaking schools and 56.6 per cent in Swedish-speaking schools), while both language groups scored the same average result in the demonstration (72 per cent).

Comparing students who had taken home economics as an optional subject and those who only studied it as part of their core subjects, the students on optional courses performed better in the written exam (63 per cent of maximum points) and in the demonstration (75 per cent of maximum points) than those on the core subjects courses. Analysing the students who only took home economics as part of their core studies, it was found that their average percentage of correctly completed questions remained four percentage points lower in the written exam and seven percentage points lower in the demonstration than those of students on optional courses.

Students in need of special support (10.6 per cent of the sample group) scored lower results in both exams in comparison with other students. The group of students in need of special support included those who had received a decision on the need for special or enhanced support, or a corresponding previous decision on admittance for special needs education, or who had an individualised curriculum in home economics. Their average percentage of correctly completed questions remained 12 percentage points lower in the written exam and 11 percentage points lower in the demonstration than the respective results of other students. The performance of students in need of special support was particularly weak in the productive tasks of the written exam, where the difference was 15 percentage points compared to the average percentage of correctly completed questions.

While students whose home language was other than Finnish or Swedish (2.1 per cent of the sample group) scored lower average results in the written exam compared to other students, their performance in the demonstration did not attain statistical significance. Based on the results of the student survey, students whose home language was other than Finnish or Swedish were engaged in more extracurricular activities related to home economics than those whose home language was Finnish or Swedish.

Parents' matriculation examination correlated with students' exam performance. In the written exam, students who reported both of their parents having passed the matriculation examination demonstrated slightly better achievement than other groups. The home economics grades also correlated with exam performance, as stu-

dents who had received higher grades performed better in the assessment, and vice versa. Similarly, extracurricular home economics activities influenced the national assessment performance. On average, extracurricular activities, even at a moderate level, showed as higher achievement in the assessment of learning outcomes in home economics. Analysing the sample group's average learning outcomes by the task type, results were considerably higher in multiple choice questions (65.6 per cent solved correctly) than in tasks requiring students to produce the answers (52.2 per cent solved correctly). That said, the multiple choice questions included a higher number of easy tasks compared to the production tasks.

Of the sample student group, 70 per cent said they enjoyed school to a fairly high or very high degree. The sample students were also asked whether they liked home economics, whether they thought the subject was useful, and what kinds of opinions they had of their own skills and of teaching practices. Generally, all sampled students showed positive attitudes towards home economics, but girls more so than boys. Compared to the boys' attitudes, girls liked home economics more, thought they had learned the course contents better, and felt that home economics was more useful for them. The attitudes of those in the best-performing decile were, on average, more positive in all areas of the assessment than those of the students in the weakest-performing decile. The differences in attitudes between the students in Finnish-speaking and Swedish-speaking schools were not identified as being statistically significant.

A total of 163 teachers (aged 25–64) responded to the teacher survey, as part of the assessment of the sample schools. Of the teachers, 86 per cent in Finnish-speaking schools and 81 per cent in Swedish-speaking schools said they were qualified home economics teachers, while 57 per cent of the teachers across the sample group reported as being qualified for some other subject as well. On average, the most common teaching methods were couple and group work, independent work during lessons, and functional exercises. The least used methods were debates, smart boards, tablets, and role playing or theatre. With regard to grading, respondents said their grading was, on average, largely influenced by continuous monitoring, lesson work, cooperation and interactive skills, and food preparation skills. Of the learning materials, the teachers primarily used textbooks, self-prepared materials and visualisation tools, while the least used materials were learning games and subject-specific exercise books. Teachers thought the most important factor preventing good learning outcomes was the students being more interested in things other than school work.

The principal survey was responded by 89 per cent of the sample school principals. According to the respondents, while the size of teaching groups in home economics varied, on average it was 16 students. The majority of the principals (78.9 per cent) said their school had purchased home economics textbooks or other material during the current school year, and all of them reported their school's home economics teacher having had access to continuing education without loss of income for at least 1–2

days per school year. The principals themselves were also sufficiently able to access continuing education. As the schools used different methods for calculating their financial resources, the figures given for home economics resources were not fully comparable. However, most of the respondents thought their ability to implement home economics, as defined by the national core curriculum, was either fairly good or very good. The majority of the principals (89 per cent) found the three-tier support model to be efficient. When asked about the students' opportunities to influence school work, "student association" was the most common answer (70 per cent) given by the principals, while parents were reported to be mostly participating through parents' evenings and associations. The principals found the Wilma system to be a good tool. Of the principals in Finnish-speaking schools, 77 percent thought home economics was an important subject, compared to 84 per cent of the principals in Swedish-speaking schools. Roughly 30 per cent of the principals thought there was insufficient provision of school healthcare or social services for supporting the teaching staff, and the same percentage of principals said that there were not sufficient enough teaching assistants available to support the teachers.