

## Section 1

A French science teacher has seen this article and asks for some clarification.

In 2003, a faded file of class notes written nearly a century before was saved from destruction. Rémi Chavannes was burning some family papers when he found a file of yellowing class notes written by his great-aunt, Isabelle Chavannes. He flicked through the pages and discovered that they were verbatim accounts of lessons given by Marie Curie, the Polish-born winner of the Nobel Prize for her work on radioactivity. Both the tone and the method recorded here showed that Curie's educational experiments were as revolutionary for teaching as they were for science.

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*La coopérative d'enseignement* – the teaching cooperative – was set up in 1907 by Curie with a group of scientists, artists and academics. Children as young as six were given practical experience at high-school level, while the morning-only lessons given in a laboratory at the Sorbonne – the university of Paris – or at private houses finished with chocolate and croissants. The lesson notes taken reveal an astonishing feeling of freshness as if these children were the first to be taught in this style.

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When the cooperative was set up, France was involved in a national debate on popular education, split between a small élite who paid to go to high school and the mass whose learning ended at primary level. Curie, then 40 and a widow, decided to break through prejudices that did not allow girls to take the *baccalauréat*. Science for girls was also a taboo. Curie was so scathing about the small-mindedness of the French system that she wrote: 'Sometimes I think it would be better to drown children than to lock them up in present-day schools!'

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About 10 children, all from friends' families, were taken out of the public system for inclusion in the cooperative. The records of the lessons on elementary physics, based on the level expected of 14-year old *lycée* students, reflect the scientist's astonishing simplicity and patience. Experiments included practical work on density, ways to make a barometer and how to make an egg float. Pupils were encouraged to come up with their own ideas and solutions. Asked for methods of keeping water hot in a pot, the children offered a series of ingenious possibilities, only to be told: 'I'd begin by putting a lid on it.' She also told her pupils to avoid mistakes. 'The secret is not to work too quickly.'

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The press mocked practical science lessons for children 'who can barely read and write' and one paper thought that the Sorbonne laboratory in the Rue Cuvier might one day go up in smoke. However, collective teaching ended after two years. Until the release of Chavannes' notes, Curie's pioneering efforts to break the educational mould had been almost forgotten. In 2003, the lesson notes were at the centre of ceremonies to honour Curie for her work. It was Hélène Langevin-Jolie, Curie's grand-daughter, who authorised their publication. That she herself is one of today's top scientists is surely testament to the success of her grand-mother's revolutionary methods.

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1 Répondez en français aux questions suivantes:

- (a) Dans le premier paragraphe, qu'est-ce qu'on dit à propos des notes d'Isabelle Chavannes? (lignes 1-7) [4]
- (b) En quoi les cours de la coopérative d'enseignement étaient-ils extraordinaires? (lignes 8-13) [4]
- (c) Pourquoi Marie Curie voulait-elle changer le système d'enseignement en France? (lignes 14-20) [4]
- (d) Donnez trois exemples des méthodes employées par Marie Curie dans les cours de physique. (lignes 21-28) [4]

*[Pour cette question, 12 points sont accordés pour le contenu et 4 points pour la qualité de l'expression en français.]*

[Total: 16 marks]

2 Selon le dernier paragraphe, comment les attitudes envers le travail éducatif de Marie Curie ont-elles changé? Donnez cinq faits.

Quelles sont vos réactions personnelles à la lecture de ce texte ?

N'écrivez pas plus de 140 mots.

*[Pour cette question, 10 points sont accordés pour le contenu et 14 points pour la qualité de l'expression en français.]*

[Total: 24 marks]

**Section 2**

**3** Traduisez le texte suivant en français:

After the summer holidays, Jenny, always the first to arrive, found herself alone in the classroom. When Susan came in, Jenny had her books out and was already working. She looked up.

'Please can you help me?' she asked.

Susan looked over Jenny's shoulder. 'French!' she exclaimed. 'I'm not very good at languages.'

Jenny looked disappointed. 'I wanted my mum to help, but she's forgotten everything.'

Susan looked away, ashamed. She hadn't spoken to Jenny since that day at the swimming pool, and she had never seen Anna or the others speak to her. She decided to make an effort to be nice to her.

It wasn't easy at first. She found it difficult to discuss things with Jenny. They weren't interested in the same things and she was very embarrassed if other people saw them together. Sometimes she would just greet her and then go off with Anna. Jenny always smiled at her and seemed happy with that.

[Total: 40 marks]